

## PATENT COOPERATION TREATY

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## **PCT**

### **NOTIFICATION OF ELECTION**

(PCT Rule 61.2)

DENT, Paul, W. et al

Assistant Commissioner for Patents United States Patent and Trademark Office Box PCT

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Date of mailing (day/month/year)
06 January 2000 (06.01.00)

International application No.
PCT/US99/10603

International filing date (day/month/year)
13 May 1999 (13.05.99)

Applicant

in its capacity as elected Office

Applicant's or agent's file reference
8993/94

Priority date (day/month/year)
15 May 1998 (15.05.98)

1.	The designated Office is	s hereby notified of	its election mad	e:					
	X in the demand file	ed with the Internat	ional Preliminary	Examining A	uthority on:			.* .	
:		<u> </u>	2 December	1999 (02.12.	99)			•	•
	in a notice effecti	ng later election file	ed with the Interr	national Bureau	ı on:				
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2.	The election X w	as	v.		i .	÷ ·	* *	c	
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	made before the expira Rule 32.2(b).	tion of 19 months f	rom the priority	date or, where	Rule 32 applies	, within th	e time limit	under	
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The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

Sean Taylor

Telephone No.: (41-22) 338.83.38

Facsimile No.: (41-22) 740.14.35

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## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 8993/94	FOR FURTHER see Notification (Form PCT/IS	on of Transmittal of International Search Report A/220) as well as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/US 99/10603	13/05/1999	15/05/1998
Applicant		
ERICSSON, INC. et al.		
This International Search Report has bee according to Article 18. A copy is being tra	n prepared by this International Searching A ansmitted to the International Bureau.	Authority and is transmitted to the applicant
This International Search Report consists  X It is also accompanied by	of a total of2 sheets. a copy of each prior art document cited in t	this report.
1. Basis of the report		
language in which it was filed, un	international search was carried out on the ess otherwise indicated under this item.	basis of the international application in the
the international search w Authority (Rule 23.1(b)).	as carried out on the basis of a translation	of the international application furnished to this
was carried out on the basis of the	e sequence listing :	e international application, the international search
I	nal application in written form. rnational application in computer readable f	form.
	this Authority in written form.	om.
	this Authority in computer readble form.	
	osequently furnished written sequence listing s filed has been furnished.	g does not go beyond the disclosure in the
l — — — — — — — — — — — — — — — — — — —		m is identical to the written sequence listing has been
2. Certain claims were fou	nd unsearchable (See Box I).	•
3. Unity of invention is lac	king (see Box II).	
4. With regard to the <b>title</b> ,		
the text is approved as su	bmitted by the applicant.	
	hed by this Authority to read as follows: OR WITHOUT SECOND SYCHRON I	ZATION WORD IN A MOBILE
5. With regard to the abstract,		
the text is approved as su the text has been establis within one month from the		ority as it appears in Box III. The applicant may, report, submit comments to this Authority.
6. The figure of the <b>drawings</b> to be publ	_	3
as suggested by the appli		None of the figures.
because the applicant fail because this figure better	ed to suggest a figure. characterizes the invention.	

A. CLASSIFICATION OF SUBJECT MATTER IPC 6 H04J3/06 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 6 HO4B H04J Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category ° Relevant to claim No. Α DE 27 39 978 A (TEKADE FELTEN & 1-25 GUILLEAUME) 15 March 1979 (1979-03-15) page 3, line 7 - line 21 page 4, line 12 - line 19 page 5, line 15 - line 25 figures 1,2 EP 0 269 974 A (IBM) Α 1-25 8 June 1988 (1988-06-08) column 4, line 6 - line 11 figure 2 EP 0 594 551 A (ERICSSON GE MOBILE Α 1-25 COMMUNICAT) 27 April 1994 (1994-04-27) cited in the application column 1, line 10 - line 28 column 5, line 16 - line 36 figure 2B Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents : "T" later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not cited to understand the principle or theory underlying the considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or other means ments, such combination being obvious to a person skilled "P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 31 August 1999 07/09/1999 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Larcinese, A Fax: (+31-70) 340-3016

national Application No PCT/US 99/10603

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 2739978	Α	15-03-1979	NONE	
EP 0269974	A	08-06-1988	US 4847877 A JP 1763633 C JP 4052019 B JP 63142742 A	11-07-1989 28-05-1993 20-08-1992 15-06-1988
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## **PCT**

## WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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15 May 1998 (15.05.98)

US

(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application

US

60/085,710 (CIP)

Filed on

15 May 1998 (15.05.98)

(71) Applicant (for all designated States except US): ERICSSON, INC. [US/US]; 7001 Development Drive, Research Triangle Park, NC 22709 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): DENT, Paul, W. [GB/GB]; 637 Eagle Point Road, Pittsboro, NC 27312 (US). RAITH, Krister [SE/SE]; 805-A Park Ridge, Durham, NC 27713 (US).

(74) Agent: RAUCH, John, G.; Brinks Hofer Gilson & Lione, P.O. Box 10087, Chicago, IL 60610 (US).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

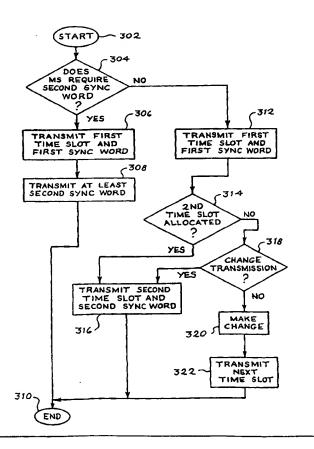
#### **Published**

With international search report.

(54) Title: SIGNAL DECODING WITH OR WITHOUT SECOND SYNCHRONIZATION WORD IN A MOBILE COMMUNICATION SYSTEM

## (57) Abstract

A time division multiple access (TDMA) radio communication system (100) accommodates signal decoding by a mobile station (130) with and without a second synchronization word (214). The radio communication system includes at least one base station (102, 104) to transmit radio signals during a succession of time slots (202, 204, 206) including a current time slot (202) and a subsequent time slot (204). The radio signals include an indication of whether transmission of the subsequent time slot is guaranteed. The system further includes at least one mobile station to receive the radio signals in accordance with the indication.



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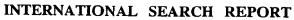
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## INTERNATIONAL SEARCH REPORT

Inter. anal Application No

		PCT/US 9	9/10603
A. CLASSII	FICATION OF SUBJECT MATTER H04J3/06	<u> </u>	
1100	1104037 00		
According to	o International Patent Classification (IPC) or to both national classifica	tion and IPC	
	SEARCHED	non and IFC	
Minimum do IPC 6	cumentation searched (classification system followed by classification HO4B HO4J	n symbols)	
1100	11040		
Documentat	ion searched other than minimum documentation to the extent that si	uch documents are included in the fields	searched
Electronic da	ata base consulted during the international search (name of data bas	e and, where practical, search terms use	d)
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C. DOCUME	ENTS CONSIDERED TO BE RELEVANT		·
Category <sup>2</sup>	Citation of document, with indication, where appropriate, of the rele	evant passages	Relevant to claim No.
Α	DE 27 39 978 A (TEKADE FELTEN &		1-25
	GUILLEAUME) 15 March 1979 (1979-0	3-15)	
	page 3, line 7 - line 21 page 4, line 12 - line 19		
	page 5, line 15 - line 25		
	figures 1,2		
Α	EP 0 269 974 A (IBM)		1-25
	8 June 1988 (1988-06-08) column 4, line 6 - line 11		
	figure 2		
Α	EP 0 594 551 A (ERICSSON GE MOBIL	F	1-25
,	COMMUNICAT) 27 April 1994 (1994-0		
	cited in the application column 1, line 10 - line 28		
	column 5, line 16 - line 36		
	figure 2B		
Funth	ner documents are listed in the continuation of box C.	X Patent family members are liste	d in annex.
' Special cal	tegories of cited documents:	"T" later document published after the in	
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which i	int which may throw doubts on priority claim(s) or is cited to establish the publication date of another or other special reason (as specified)	involve an inventive step when the "Y" document of particular relevance; the	claimed invention
	ent referring to an oral disclosure, use, exhibition or	cannot be considered to involve an document is combined with one or i ments, such combination being obv	nore other such docu-
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	actual completion of the international search	Date of mailing of the international s	<del>-</del>
3:	1 August 1999	07/09/1999	
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	European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.		
	Fax: (+31-70) 340-2040, 1X: 31 651 epo ni,	Larcinese, A	







information on patent family members

Inte. onal Application No PCT/US 99/10603

Patent document cited in search repor	t	Publication Patent family date member(s)		Publication date	
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EP 0594551	А	27-04-1994	US AU CN SG WO US	5335250 A 5446394 A 1100579 A 43305 A 9409582 A 5841816 A	02-08-1994 09-05-1994 22-03-1995 17-10-1997 28-04-1994 24-11-1998